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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/558,362

12/21/2005

Ross A. Gresley

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LUCAS & MERCANTI, LLP
475 PARK AVENUE SOUTH
15TH FLOOR
NEW YORK, NY 10016

EXAMINER

CHARLES, MARCUS

ART UNIT

PAPER NUMBER

3682

MAIL DATE

DELIVERY MODE

07/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/558,362	Applicant(s) GRESLEY, ROSS A.	
	Examiner Marcus Charles	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the amendment filed 04-02-08 and RCE filed 4/18/2008, which has been entered. Claims 1-10 are currently pending.

Continued Examination Under 37 CFR 1.114

1. The request filed on 04-18-2008 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/558,362 is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1, 4-7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Muntnich et al. (4,971,460). Muntnich et al. discloses a radial/axial bearing (see fig. 1) comprising a radial bearing (1) received in a cylindrical sleeve (3) and having cylindrical rolling bodies (1) and an axial bearing having cylindrical rolling bodies (4) such that the radial and axial bearings are connected to form a captive structural unit comprising an outer running track (see 15) of the axial bearing is formed by a radially inward-pointing rim (6) of the cylindrical sleeve (3), the rim adjoining an axially outward projecting cylindrical portion (not labeled) of the sleeve (3), while an inner running track (see item 5) of the axial bearing is formed by a radially outward pointing rim (see 5) of the inner ring (2) of the radial bearing; the prolongation of the axes of rotation of the radial

bearing (1) intersect the axis of the axial bearing intersects at the center of the cylindrical rolling body (4) of the axial bearing. In addition, the axial bearing (4) and radial bearing (1) are arranged axially one beside the other substantially in one plane.

In claim 4, note the inward pointing flange (4).

In claims 5-6, note the cages for the axial and radial bearings.

In claim 7, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight. However, Muntnich discloses the sleeves are formed from sheet metal disc made by none cutting procedure. (col. 2, lines 46-50).

Regarding claim 10, the radial extent of the cylindrical rolling bodies of the axial bearing (4/10) is smaller than the radial extent of the radial bearing (1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muntnich et al. in view of Bauer et al. (5,829,890). Muntnich et al. do not disclose the radial bearing (1) has a smaller ratio of diameter to the length than the rolling bearing (4) of the axial bearing. Bauer et al. disclose a radial/axial bearing having a radial bearing (R) with a smaller ratio diameter to the length than the axial bearing (5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the device of Muntnich et al. so that the radial bearings have a smaller ratio of diameter to the length than the axial bearing in view of Bauer et al. in order to reduce actual friction and to reduce the radial size of the bearing thus making the bearing more compact.

Regarding claim 3, Muntnich et al. in view of Bauer et al. fails to disclose the ratio as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Muntnich et al. in view of Bauer et al. so as to obtain the ratios as claimed, since it has been held that where the general conditions of a claim is disclosed in the prior art, discovering the optimum ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claims 8-9, Muntnich discloses the axial bearing (4/10) has a smaller diameter than the radial bearing (1) between the sleeves (2/3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the section containing the axial bearing so that the diameter of the sleeve section housing the axial bearing (4/10) is smaller than the sleeve section housing the radial bearing and the diameter of the axially inward-pointing flange to be larger than the inside diameter of the inner ring and diameter of the axially outward-projecting cylindrical portion of the sleeve is smaller than the diameter of cylindrical sleeve, since such a modification would have involved a mere change in the size and shape of the bearing sleeve. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Response to Arguments

6. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marcus Charles
/Marcus Charles/
Primary Examiner, Art Unit 3682

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